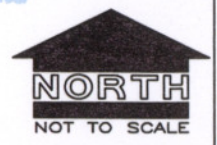


EDEN  
Medora-Beach  
Phase 3 Construction  
(2007-2009)

OMND Phase of  
Construction  
(2008-2017)



**LEGEND**  
**PIPELINE**

- Raw Water Line
- Main Transmission Line
- Proposed MTL
- Secondary Main Transmission Line
- Rural Distribution Line
- Missouri West Water System

**FACILITIES**

**Tanks**

- MTL
- SMTL
- RWL
- Future

**Other**

- Future Booster
- VFD Booster
- Pneumatic Booster
- Control Vault
- Pump Station (Raw Water)
- ▲ T-1 PRV
- ▲ Intake
- ▲ Treatment Plant

**BOUNDARIES**

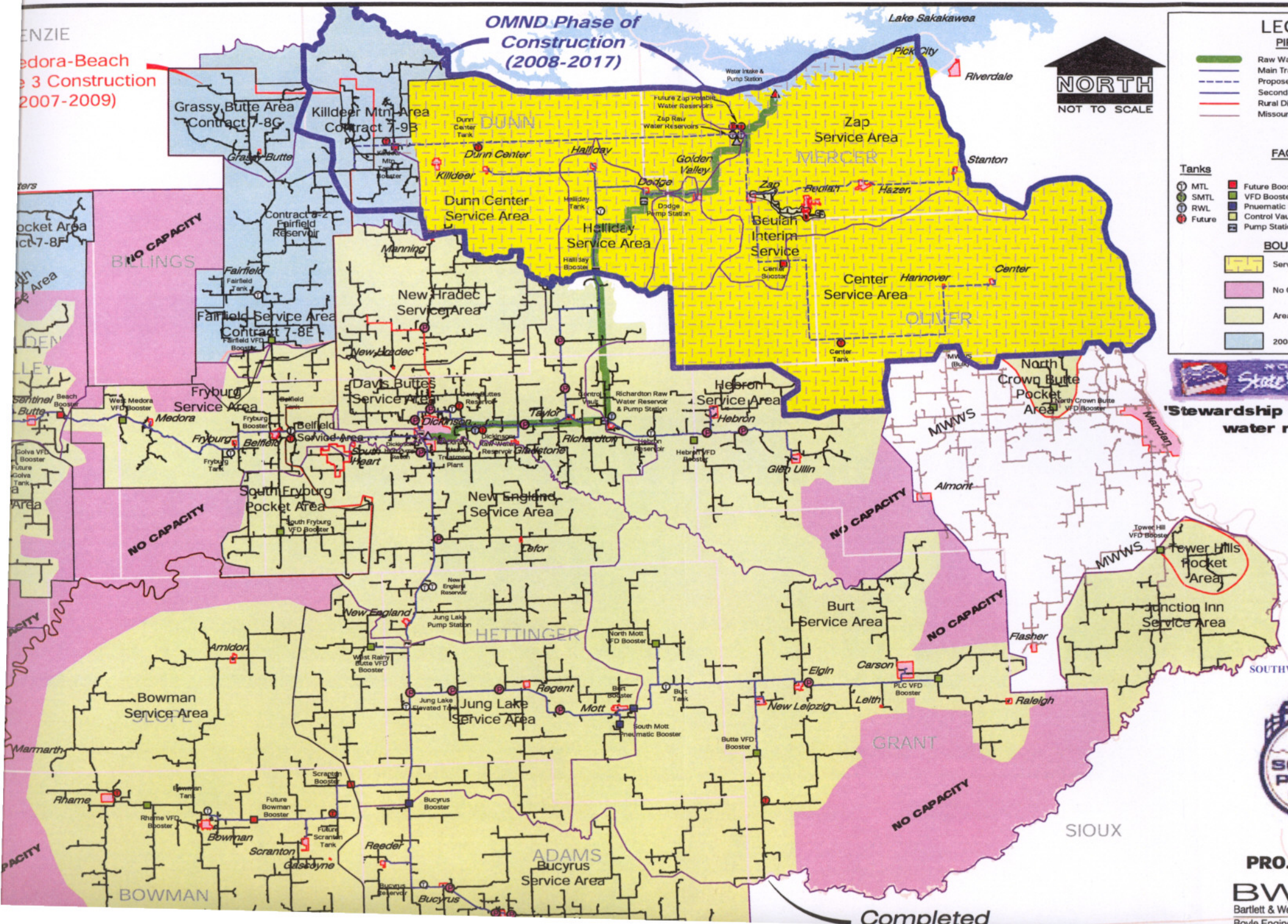
- Service Areas Not Constructed
- No Capacity Areas
- Areas Constructed
- 2008-09 Construction



**"Stewardship of North Dakota water resources."**

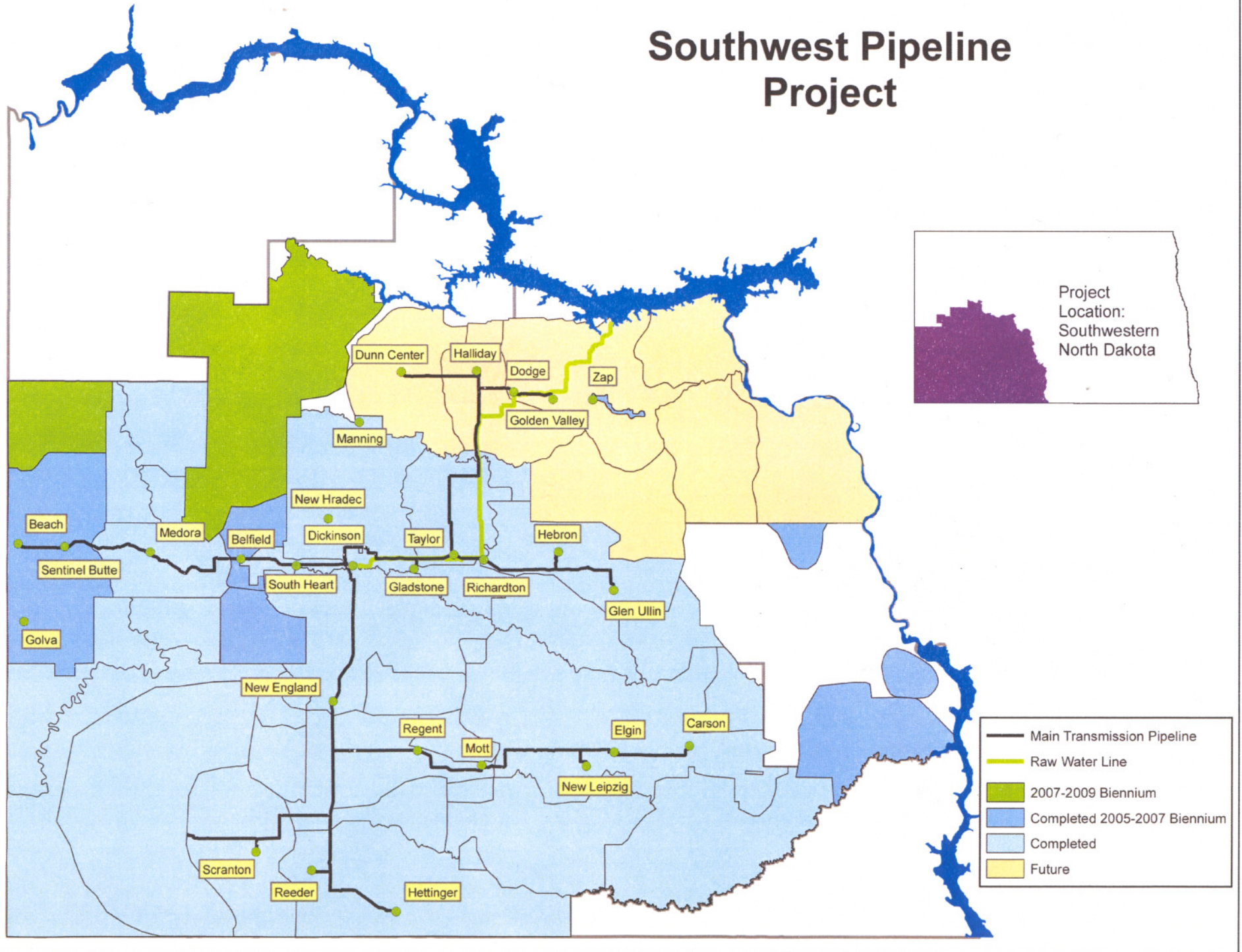


**PROJECT STATUS**  
**BW / BEC**  
Bartlett & West Inc.  
Boyle Engineering Corporation





# Southwest Pipeline Project





# SWPP TIMELINE



	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
<b>PROJECTS</b>																				
West River Diversion																				
SW Area Water Supply																				
Southwest Pipeline Project																				
<b>ORGANIZATIONS</b>																				
West River Water Supply District																				
West River Joint Board																				
Southwest Water Authority (Nonprofit)																				
Southwest Water Authority (Political Subdivision)																				
<b>FUNDING (In Millions)</b>																				
State Resources Trust Fund													23.60							
Garrison Diversion MR&I																	7.38	8.33	6.67	2.65
Natural Resources Conservation Service																				
Revenue Bonds																				
USDA - Rural Development (Loans)																				
USDA - Rural Development (Grants)																				
Drinking Water State Revolving Loan Fund																				
Water Development Trust Fund																				
<b>TOTAL</b>													<b>23.60</b>				<b>7.38</b>	<b>8.33</b>	<b>6.67</b>	<b>2.65</b>

SWPP Authorized

SWPP Final Design Authorized

SWPP Final Construction Authorized

Construction Begins  
Garrison MR&I Funding

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Total
<b>PROJECTS</b>																				
West River Diversion																				
SW Area Water Supply																				
Southwest Pipeline Project																				
<b>ORGANIZATIONS</b>																				
West River Water Supply District																				
West River Joint Board																				
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Southwest Water Authority (Political Subdivision)																				
<b>FUNDING (In Millions)</b>																				
State Resources Trust Fund	0.04	0.06	0.68	0.77	1.46	1.77	1.18	0.70	1.34	4.21	0.83	0.33	3.06	2.38	3.05	1.62	0.69	2.70	4.36	54.83
Garrison Diversion MR&I	5.32	6.87	5.30	10.10	7.77	5.41	0.18	2.47	1.24									2.94	1.29	73.92
Natural Resources Conservation Service				0.13	0.41	0.39														0.93
Revenue Bonds							3.96	3.08												7.04
USDA - Rural Development (Loans)							3.50	0.02	1.38	0.50	0.23	1.63	1.54		2.47	1.43	3.00			15.70
USDA - Rural Development (Grants)							1.04	1.54	1.59	2.48	0.92	1.04	0.56	1.30	1.93	0.52	2.07	0.10		15.09
Drinking Water State Revolving Loan Fund									1.00	0.50										1.50
Water Development Trust Fund										1.45	5.17	0.26	0.45		0.09	1.05				8.47
<b>TOTAL</b>	<b>5.36</b>	<b>6.93</b>	<b>5.98</b>	<b>11.00</b>	<b>9.64</b>	<b>7.57</b>	<b>5.32</b>	<b>10.79</b>	<b>4.14</b>	<b>8.18</b>	<b>5.76</b>	<b>6.65</b>	<b>5.99</b>	<b>4.93</b>	<b>4.35</b>	<b>6.11</b>	<b>3.69</b>	<b>10.71</b>	<b>5.75</b>	<b>177.48</b>

Location of Water Treatment Plant  
Rural Water Integration  
Service to Dickinson

First Rural Water Service (Roshau)

Service Beyond Dickinson  
Full Scale Rural Service

Transfer of Operations to SWA  
USDA-Rural Dev. Funds and Rev. Bonds

Garrison MR&I Funding  
SB 2188 Passed

State Funding Bowman-Scranton Phase

State Funding Medora-Beach Phase

State & USDA Funding Medora-Beach Phase II

State & USDA Funding Medora-Beach Phase III

Received MR&I Funding; first time since 1999

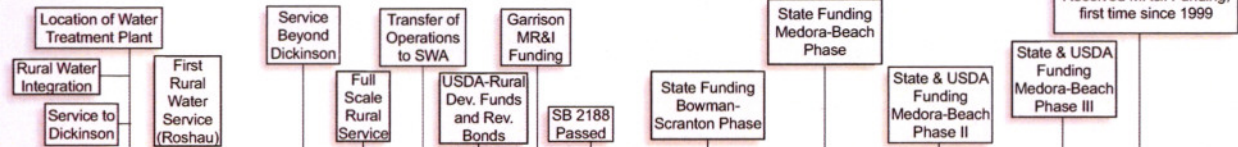


# SWPP TIMELINE



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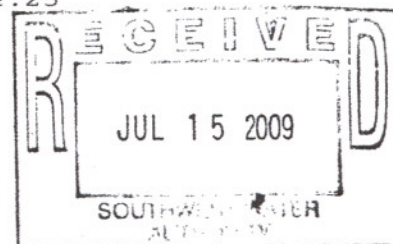
North Dakota Department of Health  
Chemistry Division

Original Report Date: 7/ 6/09

Report Date: 7/ 6/09

Log Number: 09-N391  
Date Collected: 6/ 8/09  
Time Collected: 11:00  
Township:  
Section:  
Source: RAW WATER  
Project:  
Comments: COLLECTOR: KEN KNIGHT  
SOUTHWEST WATER AUTHORITY  
ATTN RAY CHRISTENSEN  
4665 2 ST SW  
DICKINSON ND 58601

Date Received: 6/ 8/09  
Time Received: 14:25  
Range:  
Owner: SWA



Approved by: 

Inorganic

Chemical Analysis of Sample			
Analyte	Result	Units	Evaluation
Conductivity	596.	umhos/cm	
Dissolved Solids(C) -Total	358.	mg/L	Fairly Low
Hardness Total (as CaCO3)	196.	mg/L	Satisfactory
Alkalinity (CaCO3) (Total)	149.	mg/L	Fairly Low
pH	8.14		
Iron (Fe)	< 0.05	mg/L	Satisfactory
Manganese (Mn)	< 0.01	mg/L	Satisfactory
Calcium (Ca)	47.1	mg/L	
Magnesium (Mg)	19.0	mg/L	
Sodium (Na)	47.7	mg/L	Fairly Low
Potassium (K)	3.6	mg/L	
Carbonate (CO3)	< 1	mg/L	
Bicarbonate (HCO3)	181.	mg/L	
Sulfate as (SO4)	139.	mg/L	Fairly Low
Chloride	9.58	mg/L	Low
Nitrate + Nitrite (N)	0.15	mg/L	Satisfactory
Silica (SiO2)	6.29	mg/L	
Fluoride (F) (IC)	0.435	mg/L	
Hydroxide (OH)	< 1	mg/L	
Hardness (Total)	11.	gr/gal	
Turbidity	2.50	NTU	
Percent Sodium	34.0	%	
Sodium Adsorption Ratio	1.48		

This water is classified C2-S1 for irrigation.  
Contact your county agent for more information.



# 2009



# PROGRESS REPORT



## BACKGROUND IN BRIEF

The Southwest Pipeline Project (SWPP), a state-owned project, administered by the ND State Water Commission and operated and maintained by the Southwest Water Authority (SWA), transports raw water from Lake Sakakawea to Dickinson. There, the water is treated and delivered to customers throughout southwest North Dakota and Perkins County, South Dakota.

The North Dakota State Legislature established the SWA, a political subdivision, in 1991 to manage, operate and maintain the SWPP. A 14-member board of directors is responsible for governing the SWA. Each county within the SWPP Service Area is represented by one director and the city of Dickinson is represented by two. The counties represented include: Adams, Billings, Bowman, Dunn, Golden Valley, Grant, Hettinger, Mercer, Morton, Oliver, Slope and Stark.

This past legislative session saw the expansion of SWA's authority and extension of its mill levy. It also saw the addition of a board member from the city of Mandan. SWA looks forward to welcoming its newest board member representing the city of Mandan on July 1, 2010.

For 24 years, the SWPP has been constructing an efficient network of pipelines, pump stations, reservoirs and treatment facilities, bringing southwest North Dakota a consistent quantity of quality water. To date, the pipeline serves 28 communities, more than 4,000 rural service locations, 14 small businesses and 15 raw water customers.

## HIGHLIGHTS

In an effort to better serve our customers a survey was conducted by a consulting firm. Surveys were mailed to all contract and rural customers. Survey results indicated more than 50 percent of individuals ranked courtesy, timeliness and knowledge of the SWA staff as "excellent."

The North Dakota Department of Health issued the SWA certificates of compliance for successfully meeting all of the Environmental Protection Agency (EPA) requirements for each of the SWA's five public water systems. SWA also received the Water Fluoridation Quality Award from the United States Centers for Disease Control (USCDC). Water fluoridation has been recognized by the USCDC as one of the 10 great public health achievements of the 20th Century.

Pandemic. Drought. Tornado. Floods. Preparedness is critical to succeed in today's world. In 2009 the primary focus for emergency preparedness was the pandemic flu. SWA will continue to develop effective strategies to improve the overall Emergency Response Plan in preparation for potential disasters.

In November, 2008, North Dakota became an official Water/Wastewater Response Network (WARN) state. In April, 2009, the board of directors voted to join ND WARN and sign the mutual aid agreement. This agreement will provide resources such as specialized equipment and/or staff should the need arise in a disaster situation. There are currently 19 members in the North Dakota WARN Network.

## PHASED DEVELOPMENT PLAN

### Current Development Phase

Medora-Beach Phase

West Zone

Oliver, Mercer, North Dunn Phase

North Zone



# PROGRESS

## CONSTRUCTION UPDATES

Construction is substantially complete for Phase III of the Medora-Beach Regional Service Area. Construction this past year included providing rural service to residents in the North Fairfield Service Area, the Grassy Butte Service Area, as well as the West Killdeer Mountain Pocket in northern Dunn County. A total of 426 customers are served through 396 miles of pipeline. The Fairfield Reservoir, a 197,300 gallon potable water reservoir, located northwest of Fairfield was also turned over for service in 2009. Cleanup, seed bed preparation and grass seeding are all that remain on these contracts.

With the Medora-Beach Regional Service Area being completed, the focus for the Southwest Pipeline Project (SWPP) turns to completion of the Oliver, Mercer, North Dunn (OMND) Regional Service Area. The main transmission line from north of Zap to Hazen is underway. Bids were opened on June 25, 2009. The contract was awarded on July 24, 2009, to Titus Excavating Inc., of Bismarck, North Dakota. Construction began on September 1, 2009. Substantial completion of this contract, Contract 2-8A, is scheduled for June 1, 2010. Construction includes approximately 23 miles of 18" through 14" gasketed joint pipe, two pressure reducing valve vaults, road crossings, connection to the city of Hazen's distribution system, installation of a prefabricated meter vault and other related appurtenances.

The Water Treatment Plant (WTP) that will provide water service to the OMND Regional Service Area will be located approximately eight miles north of Zap along County Road 13. Membrane filtration and membrane softening will be used in this WTP. Membrane procurement documents have been completed and the membranes are currently being bid. Once awarded, final design on the WTP will be completed. It is anticipated that construction will begin in 2010 on the WTP.

Southwest Water Authority does not discriminate on the basis of race, color, national origin, sex, religion, age, marital status or disability in employment or the provision of services.

### VISION

*People and business  
succeeding with quality water.*

### MISSION

*Providing quality water  
for southwest North Dakota.*

## FUNDING

In April, Senator Byron L. Dorgan, D-ND, met with the Southwest Water Authority (SWA) board of directors, management, staff and other water advocates in Dickinson, North Dakota. Discussions were held regarding the \$8 million in federal funding the project received in 2009, as well as the \$3 million received in 2008 and the projected \$9 million for 2010.

SWA received a letter from Senator Dorgan noting that \$9 million for the Southwest Pipeline Project has been included in the appropriation bill approved by the Senate in late August. This bill has already been approved by Congress and is awaiting the President's signature.

Senator Dorgan, along with Senator Conrad and Representative Pomeroy, secured \$12 million in funding from the American Recovery and Reinvestment Act (ARRA) for construction of the WTP which will serve the OMND Regional Service Area.

All of the aforementioned funds will come to the SWPP through the Garrison Diversion Conservancy District's Municipal, Rural and Industrial (MR&I) Program.

**Editor: LoAnn's Marketing Inc.**  
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Dickinson, ND 58601-7231  
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Fax: 701-225-4058  
Web Site: [www.swa.swc.state.nd.us](http://www.swa.swc.state.nd.us)  
E-Mail: [swa@swwater.com](mailto:swa@swwater.com)

# REPORT